

GOVERNMENT OF INDIA
MINISTRY OF ATOMIC ENERGY
RAJYA SABHA
QUESTION NO 08.09.2011
ANSWERED ON
SAFETY OF TARAPORE NUCLEAR POWER PLANT

520

Shri P. Rajeeve

Will the Minister of ATOMIC ENERGY be pleased to state :-

- (a) whether it is a fact that at the Tarapore Nuclear Power Plant, units 1 & 2, are Boiling Water Reactors (BWRs), similar to ones at Fukushima, Japan;
- (b) the magnitude of earthquake on the Richter Scale that units 1 & 2 at Tarapore are equipped to withstand;
- (c) whether these units at Tarapore are equipped to withstand an earthquake measuring 9.0 on the Richter Scale, similar to the one that struck Japan on March 11, 2011; and
- (d) if not, the steps being taken to ensure that these units are equipped to withstand earthquakes of this magnitude?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY)

(a) to (d) A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA STARRED QUESTION NO. 520 FOR ANSWER ON 08.09.2011 BY SHRI P. RAJEEVE REGARDING SAFETY OF TARAPUR NUCLEAR POWER PLANT

(a) Tarapur Atomic Power Station, Units 1&2 (TAPS 1&2) are Boiling Water Reactors with enhanced features compared to the nuclear power units at Fukushima in Japan. The enhanced features include

(i) Primary Containment Volume to Power ratio is 10 times more than Fukushima nuclear power plants and
(ii) provision of an emergency condenser which can remove heat emanating from radioactive decay process even in absence of electric power supply. The higher containment volume to power ratio results in slow pressure build up in the primary containment in the event of loss of cooling as experienced in Fukushima incident. The emergency condenser ensures cooling of the fuel in the reactor even under conditions of total loss of power supply, thus assuring higher safety.

(b)&(c) The seismic hazard of Tarapur site (Zone 3 in seismic map) is different from that of Fukushima (Zone 5) in Japan. TAPS 1&2 are designed for a 5.7 magnitude earthquake in the Richter scale and corresponding peak ground acceleration. The recent assessment of the safety margin of TAPS 1&2 has concluded that the plants have adequate safety margins to withstand potential earthquakes in Tarapur site.

(d) Does not arise.